

AMENDMENTS TO THE CLAIMS:

1. (Currently amended): An assistant light source, comprising:
an elongated light stick having a reflecting prism face with a plurality of prisms and
having light emitting face opposed to said reflecting prism face, wherein an
incident light is transmitted inside thereof, the transmitted light is reflected on
said reflecting prism face, and the reflected light is emitted from said light emitting face; and
light generating means arranged on both sides of said light stick for generating the light
for emitting to said light stick;
wherein said plurality of prisms has a sectional shape in consideration of path in direct
light from said light generating means and path in light reflected on said light
emitting face,
wherein said sectional shape is substantially triangle shape having one tip angle and two
tilt angles, and wherein the tilt angles are different from each other ~~in~~ within each
prism.
2. (Previously presented): An assistant light source according to claim 1, wherein at least
one of the sectional shapes is of substantially non-isosceles triangle shape.
3. (Previously presented): An assistant light source according to claim 1, wherein prism
in the center of said light stick has substantially isosceles triangle shape.

4. (Previously presented): An assistant light source according to claim 1, wherein said tip angle is calculated as follows;

$$T=180-2\times(45-\frac{1}{2}\times\tan^{-1}(3 W/L))$$

where L represents the length of said light stick, and W represents the width of said light stick.

5. (Previously presented): An assistant light source according to claim 1, wherein a smaller tilt angle is calculated as follows;

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(W/2 X)$$

where W represents the width of said light stick and X represents a distance from an end of said light stick to a prism.

6. (Previously presented): An assistant light source according to claim 1, wherein a tilt angle closer to an end of said light stick is calculated as follows;

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(3 W/2 X)$$

where W represents the width of said light stick and X represents a distance from an end of said light stick to a prism.

7. (Previously presented): An assistant light source according to claim 1, wherein a tilt angle of prism closer to an end of said light stick is calculated as follows;

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(W/2 X); \text{ and}$$

a tilt angle ($a(X)^{\circ}$) of prism in the center of said light stick is calculated as follows;

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(3 W/2 X)$$

where W represents the width of said light stick and X represents a distance from an end of said light stick to a prism.

8. (Previously presented): An assistant light source according to claim 1, wherein a tilt angle of prism susceptible to said direct light from said light generating means is calculated as follows;

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(W/2 X) \text{ and;}$$

a tilt angle of prism susceptible to the light reflected on the light emitting face is calculated as follows $a(X)=45-\frac{1}{2}\times\tan^{-1}(3 W/2 X)$ where W represents the width of said light stick and X represents a distance from an end of said light stick to a prism.

9. (Previously presented): An assistant light source according to claim 5, wherein a tilt angle of prism in area of $X < 2 \text{ mm}$ is constant.

10. (Previously presented): An assistant light source according to claim 1, wherein the depth of the plurality of prisms is calculated as follows;

(N=1 to 17)

$$D(N)=24.3$$

(N=18 to 28)

$$D(N)=1.5 \times N - 1.2$$

(N=29 to 85) (center of light stick)

$$D(N)=0.6 \times N + 24$$

where N represents the number of prisms from an end of said light stick.

11. (Previously presented): An assistant light source according to claim 1, wherein a reflective metal film is formed on said reflecting prism face.

12. (Previously presented): An assistant light source according to claim 1, wherein said light stick has an adjustment area Y in which prisms using the tilt angle calculated as follows:

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(W/2 X) \text{ and;}$$

prisms using the tilt angle calculated as follows;

$$a(X)=45-\frac{1}{2}\times\tan^{-1}(3 W/2 X) \text{ are formed alternately as light of a surface light source;}$$

where W represents the width of said light stick and X represents a distance from an end of said light stick to a prism.

13. (Previously presented): A front-light comprising an assistant light source according to claim 1; and a light guide plate for emitting light emitted from said assistant light source as light of a surface light source.

14. (Original): A liquid crystal display device comprising: a liquid crystal cell having a reflecting member; and the front-light according to claim 13 for supplying light to said liquid crystal cell.

15. (Previously presented): An assistant light source according to claim 1, wherein the reflective prism face comprises a flat surface and the plurality of prisms distributed across the flat surface.

16. (Previously presented): An assistant light source according to claim 1, wherein the tip angle is constant for each prism.

17. (Previously presented): An assistant light source according to claim 16, wherein the reflective prism face comprises a flat surface and the plurality of prisms distributed across the flat surface.

18. (Previously presented): An assistant light source according to claim 2, wherein all the sectional shapes are of substantially non-isosceles triangle shape.